

housing is driven by the centrifugal clutch while the clutch center is splined to the transmission main shaft. When the gearshift lever is moved to shift gears it also activates the clutch lifting mechanism, releasing the clutch.

Both clutch mechanisms can be removed with the engine in the frame.

CENTRIFUGAL CLUTCH

NOTE

Honda has determined that there may be a problem with some 1988-1990 2-wheel and 4-wheel drive models. If there is a grinding noise from the right-hand side of the engine, or if the engine will not idle in gear, or if the vehicle stalls when put into gear or when coming to a stop this problem may exist. Any of these situations may be caused by the failure of the one-way clutch to operate correctly. This problem was covered in the Honda Service Bulletin TRX300 & TRX300FW # 1, August 1990. If you are having this problem and the vehicle is still covered by any applicable warranty, take the vehicle to the Honda dealer and have the problem corrected.

Removal

Refer to **Figure 1** for this procedure.

1. Remove the right-hand crankcase cover as described in Chapter Four.

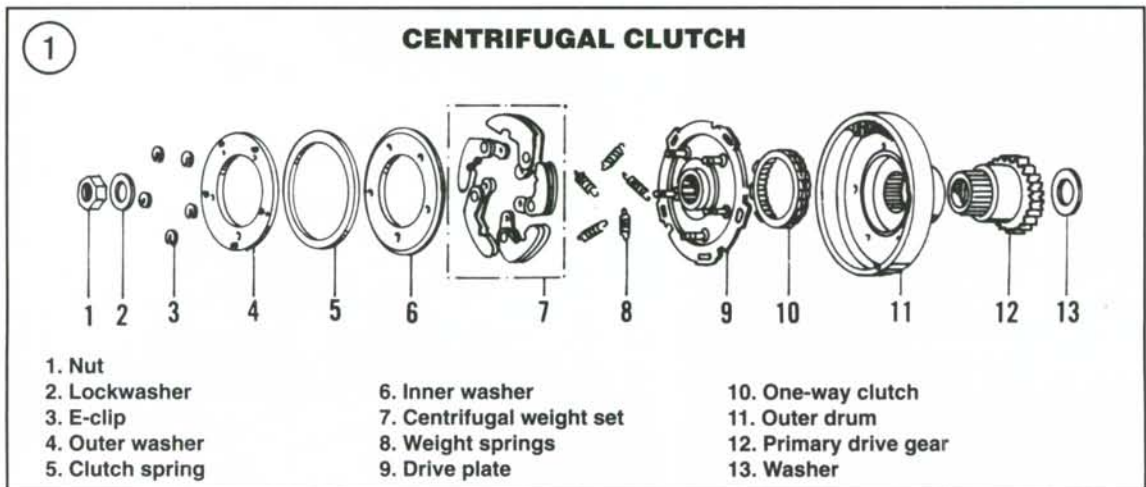
CAUTION

The locknut has left-hand threads. Loosen it by turning it clockwise.

2. Use a chisel and hammer and carefully unstake the locknut.
3. The locknut had loctite applied to it during assembly. Use an impact driver and remove the locknut (**Figure 2**) securing the centrifugal weight assembly—remember to turn the impact driver *clockwise*. Remove the nut and lockwasher.
4. Remove the centrifugal weight assembly and the outer drum from the end of the crankshaft.

Inspection

1. Separate the centrifugal weight assembly from the outer drum.
2. Clean all parts in petroleum-based solvent such as kerosene and thoroughly dry with compressed air.
3. Measure the thickness of the centrifugal weight lining (**Figure 3**) on all 5 weights. Refer to **Table 1** for specification. If the lining on one of the weights is worn to the service limit or less, replace all 5 weights as a set (they are only available as a set of 5) as described in this chapter.
4. Rotate the one-way clutch (**Figure 4**). It should only rotate *clockwise*. If it will rotate counterclockwise, even the slightest amount, it is defective and must be replaced.
5. Measure the inside diameter of the outer drum with a vernier caliper. Refer to **Table 1** for specifications. Replace if it is worn to the service limit or greater.



6. Inspect the inner splines on the outer drum (**Figure 5**) for wear or damage. If damage is severe, the outer drum must be replaced. Also check the splines on the primary drive gear on the crankshaft where the outer drum is located, it may also need replacing.
7. Inspect the inside contact surface of the outer drum (**Figure 6**) for scratches, scoring or heat damage (bluish tint). If there are deep grooves, deep enough to catch a fingernail, the outer drum should be replaced. If there are indications of heat damage, the outer drum may be distorted and must be replaced.
8. Inspect the inner splines on the drive plate (**Figure 7**) for wear or damage. If damage is severe, the drive plate must be replaced. Also check the splines on the primary drive gear on the crankshaft where the drive plate is located, it may also need replacing.
9. Inspect the clutch lifting mechanism in the right-hand crankcase cover as described in this chapter.

Centrifugal Weight Assembly Disassembly/Inspection/Assembly

1. Install the centrifugal weight assembly back into the outer drum for disassembly.
2. Using two 6 or 8 inch C-clamps; compress the centrifugal clutch spring to relieve pressure on the clutch assembly.
3. Remove the E-clips (**Figure 8**), then remove the outer washer, clutch spring and inner washer.
4. Remove the centrifugal weight and spring assembly from the outer drum.

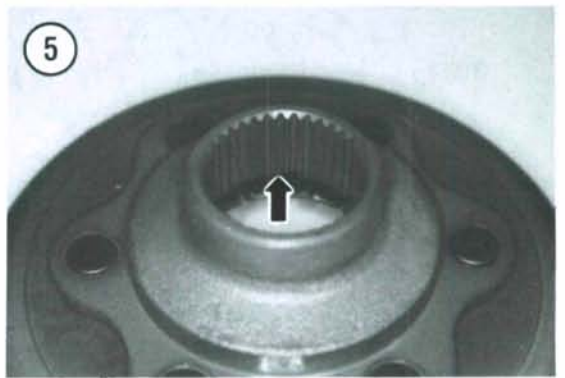
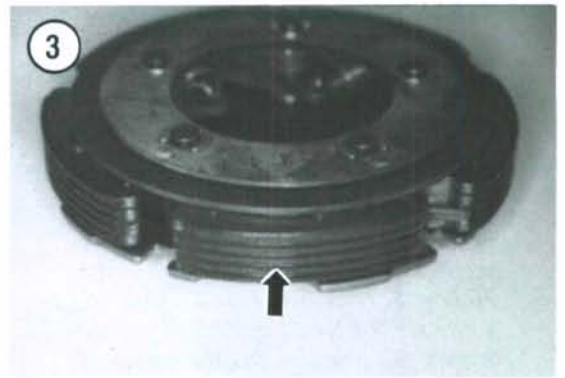
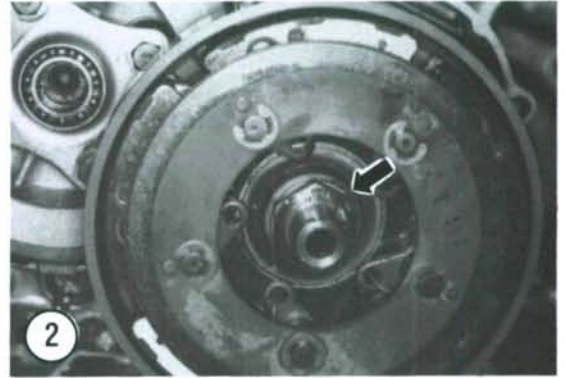
WARNING

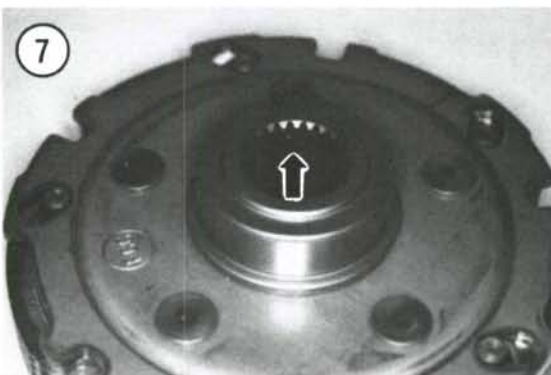
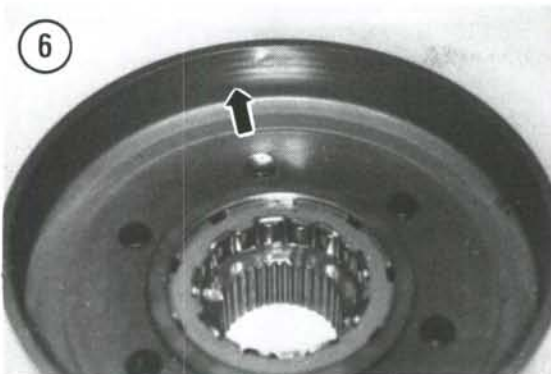
Wear gloves and eye protection for the next step. The springs are under some tension and may fly off when removed; protect yourself accordingly.

NOTE

The next step requires the aid of an assistant to safely remove the springs.

5. Inspect the centrifugal weight springs for wear or damage. Replace as a set of 5 if necessary. To replace, perform the following:
 - a. Have the assistant hold down the centrifugal weights.
 - b. Using Vise-grip pliers, remove each spring from the centrifugal weights. Remove all 5 springs.





c. Remove the centrifugal weights from the pivot posts on the drive plate.

6. Inspect the pivot posts on the drive plate for wear or damage. Replace the drive plate if necessary.

7. Measure the length of each weight spring with a vernier caliper. Refer to **Table 1** for specifications. Replace the spring if it has sagged to the service limit or less.

8. Measure the height of the clutch spring with a vernier caliper (**Figure 9**). Refer to **Table 1** for specifications. Replace the spring if it has sagged to the service limit or less.

NOTE

The next step requires the aid of a helper to safely install the springs.

9. If disassembled, install the springs as follows:

- a. Apply fresh engine oil to the pivot posts on the drive plate and install the centrifugal weights. Be sure to install the weights with the OUTSIDE mark facing up.
- b. Have the assistant hold down the centrifugal weights.
- c. Attach one end of the spring to one centrifugal weight and using Vise-grip pliers, install the other end onto the adjacent weight.

NOTE

If the centrifugal weights have been replaced with new ones, apply new engine oil to all surfaces to avoid having the clutch lock up when used for the first time.

10. Install the centrifugal weight and spring assembly into the outer drum.

11. Install the inner washer with the raised flange facing UP.

12. Install the clutch spring with the cupped side facing UP.

13. Install the outer washer with the locating pins facing up.

14. Compress the clutch spring with the tool set-up used in Step 1.

15. Install the E-clips and position the open end against the locating pins on the outer washer. Make sure the E-clips are properly seated in the groove in each pivot post.

Installation

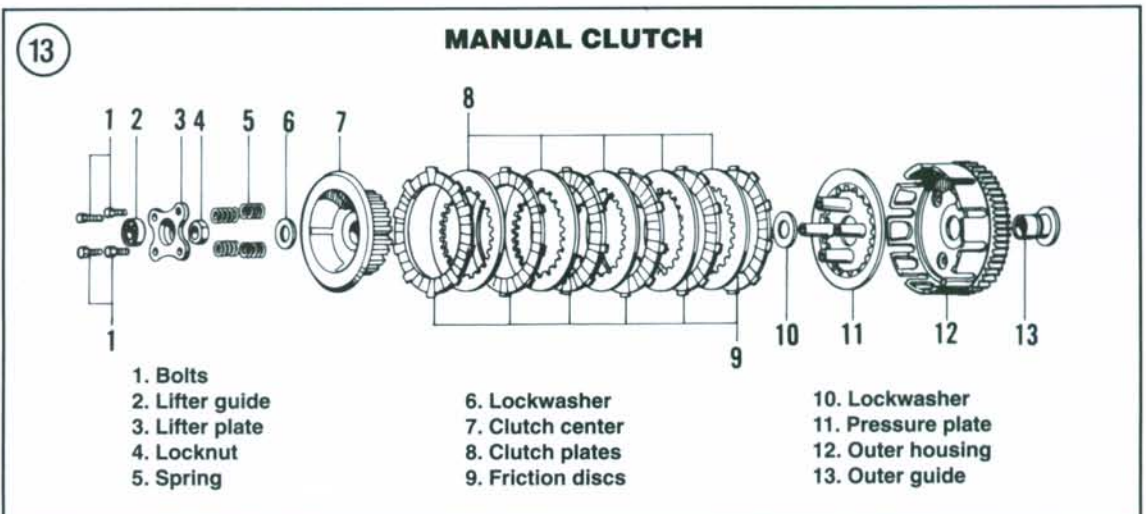
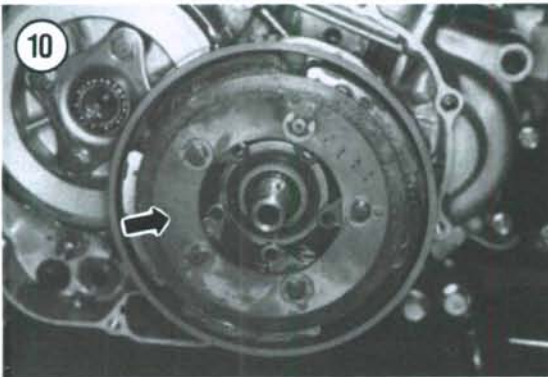
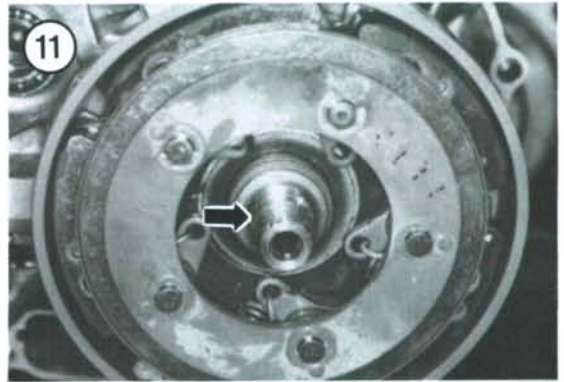
1. If removed, install the one-way clutch into the outer drum with the OUTSIDE mark facing out. This mark *must* face out—otherwise the centrifugal clutch will *not* operate at all.
2. Slide on the outer drum and centrifugal weight assembly (**Figure 10**).
3. Temporarily install the locknut and tighten to press the centrifugal weight assembly into place. Remove the locknut.
4. Install the lockwasher with the OUTSIDE mark (**Figure 11**) facing out.
5. Apply blue Loctite (No. 242) to the threads of the locknut and install the locknut (**Figure 2**).

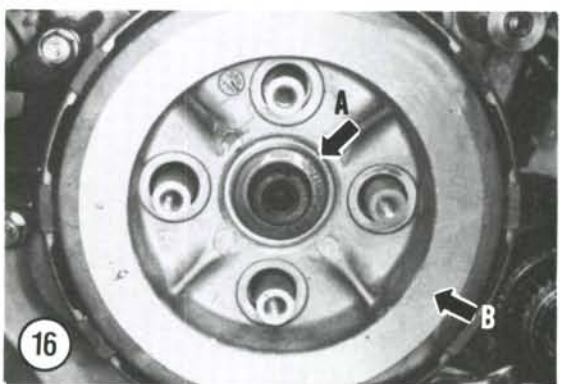
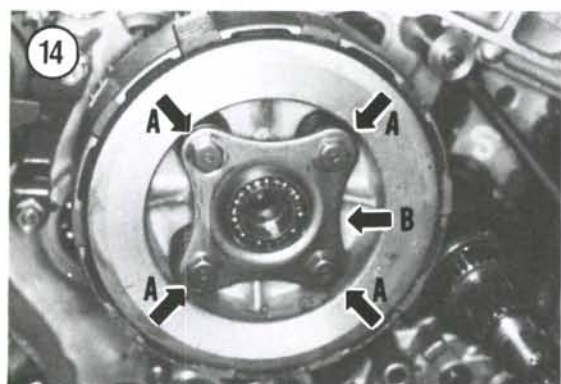
CAUTION

The locknut has **left-hand** threads. Tighten it by turning it **counterclockwise**.

6. Tighten the locknut. The locknut has left-hand threads—*remember to turn the wrench counterclockwise*. Tighten the locknut to the torque specification listed in **Table 2**.

7. Using a hammer and center punch or punch, stake the locknut (**Figure 12**) into the recess in the crankshaft.





8. Install the right-hand crankcase cover as described in Chapter Four.

9. Refill the engine with the correct type and quantity oil as described in Chapter Three.

10. Start the engine and check for oil leaks.

11. Adjust the clutch as described in Chapter Three.

MANUAL CLUTCH

Removal/Disassembly

Refer to **Figure 13** for this procedure. The centrifugal clutch has to be removed prior to removing the manual clutch.

1. Remove the centrifugal clutch assembly as described in this chapter.

2. Using a criss-cross pattern, loosen the clutch bolts (A, **Figure 14**) securing the clutch lifter plate.

3. Remove the clutch bolts, the lifter plate and bearing and the clutch springs (B, **Figure 14**).

4. Use a chisel and hammer and carefully unstake the locknut.

5. Use an impact driver and loosen the clutch locknut (**Figure 15**).

6. Remove the locknut and lockwasher (A, **Figure 16**).

7. Remove the clutch center, plates, discs, pressure plate, clutch outer housing and outer guide (B, **Figure 16**) from the transmission shaft as an assembly.

8. Inspect the clutch parts as described under *Manual Clutch Inspection* in this chapter.

Assembly/Installation

NOTE

If new friction discs and clutch plates are being installed, apply new engine oil to all surfaces to avoid having the clutch lock up when used for the first time.

1. Working at your workbench, install a friction disc (**Figure 17**) and then a clutch plate (**Figure 18**) onto the clutch center. Continue to install a friction disc, then a clutch plate, and alternate them until all are installed. The last item installed is a friction disc (**Figure 19**).

2. Install the pressure plate (**Figure 20**).

3. Install the outer guide (A, **Figure 21**) into the backside of the clutch outer housing (B, **Figure 21**).

Copyright of Honda TRX300/FOURTRAX 300 & TRX300FW/FOURTRAX 300 4x4, 1988-2000 is the property of Penton Media, Inc. ("Clymer") and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.